ver: the "Bands" extending from the southwest to the northeast, covering nearly the entire sky and apparently converging at the two points mentioned; and the whole attenuated mass was moving rapidly to the northeastward. On the 29th two "mock suns" were observed, one on either side of the sun, at an altitude of about 5°. At Buffalo, on the 1st, the unusual phenomenon of a vivid flash of "blue light" was observed over the Lake, accompanied by a loud report as of a cannon; supposed by the observer to be a "lightning ball." During the storm of the 17th, the Lake City, Fla., observer reports the electric phenomena very protracted and persistent toward the southeast, showing its connection with the Gulf Stream off the Florida coast. The Nashville observer, on the nights of the 13th and 14th, kept up meteoric observations and saw a number of shooting stars. The Marquette observer, during this month, has conducted an interesting investigation to ascertain what, if any, connection exists between barometric fluctuations and the rise and fall of the water in Lake Superior. The St. Paul observer, on the 3d, reported the "Bands" of fine cirri at 10.30 p. in, extending from west to east, through which the moon appeared surrounded with two rings, showing the prismatic colors very distinctly. The Lexington, Ky., observer reports unusual smokiness in his section—a phenomenon which has largely extended over the Lakes and is a characteristic of the Indian summer.

The first ice at Savannah was formed on the 20th of November. On the 17th the barometer fell .167 of an inch at Leavenworth, and read 29.33, the lowest reading given since last April. The observer at Leavenworth reports first ice floating in the river on the 29th. The enormous rainfall of 6.35 inches in forty-eight hours, on the 24th, was reported by the observer at Shreveport.

## STORM-WARNING SIGNALS.

Seventy-seven (77) Cautionary Signals were displayed during the month at ports in the United States and forty-four (44) at Canadian ports. The office has no returns to show how many of the signals displayed at Canadian points were justified. Out of the seventy-seven storm-warnings displayed at United States ports there were four whose justification was doubtful; but the number known to have been actually justified was 62 This gives as the percentage of verification 80.51.

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